

CLAIMS

1. A method for performing continuous extrusion of a metallic material, such as copper, so that the material to be extruded (1) is fed in the extrusion member (4) by means of a feed member (3) provided with a groove on its peripheral wall (2) and by an abutment (5) arranged in said groove, and the groove (8) is protected against oxidation by arranging for at least part of the peripheral wall (2) of the feed member (3) a gas-protecting member (7),
5 characterized in that the pressure in the space (9) left between the gas-protecting member and the feed member is higher than the pressure in the surrounding atmosphere.
10. A method according to claim 1, characterized in that the gas-protecting member (7) is arranged at least in that part of the peripheral wall (2) that does not contain material to be extruded.
15. A method according to claim 1 or 2, characterized in that the gas-protecting member (7) covers at least part of the surface of the peripheral wall (2) of the feed member in the direction of the width thereof.
20. A method according to claim 1, characterized in that the gas-protecting member covers at least the groove (8).
25. A method according to any of the preceding claims, characterized in that in the space (9) left between the gas-protecting member and the feed member, there is fed non-oxidizing gas by means of the gas-protecting member (7).
30. A method according to claim 5, characterized in that in the space (9) left between the gas-protecting member and the feed member, there is fed hydrogen.

7. A method according to claim 5, **characterized** in that in the space (9) left between the gas-protecting member and the feed member, there is fed hydrogen and nitrogen.
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8. A method according to claim 5, 6 or 7, **characterized** in that the gas is advantageously preheated up to 400 – 800 degrees.
9. A method according to claim 5, 6, 7 or 8, **characterized** in that oxygen is
10 removed from the gas by filtering before feeding the gas into the space (9) left between the gas-protecting member and the feed member.
10. A method according to any of the preceding claims, **characterized** in that the whole extrusion process is surrounded by an inert gas protection (6).
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11. A method according to any of the preceding claims, **characterized** in that the pressure in the space (9) left between the gas-protecting member and the feed member is higher than the pressure in the inert gas protection (6).
12. Equipment for performing continuous extrusion of a metallic material, such
20 as copper, where the material to be extruded (1) is fed in the extrusion member (4) by means of a feed member (3) provided with a groove on its peripheral wall (2) and by an abutment (5) arranged in said groove, and the groove is protected against oxidation by arranging for at least part of the peripheral wall (2) of the feed member (3) a gas-protecting member (7),
25 **characterized** in that the pressure in the space (9) left between the gas-protecting member and the feed member is arranged to be higher than the pressure in the surrounding atmosphere.

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13. An equipment according to claim 12, **characterized in that the gas-protecting member (7) comprises at least one protecting member (10) provided with at least one gas channel (11) for feeding gas into the space (9) left between the gas-protecting member and the feed member.**

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14. An equipment according to claim 13, **characterized in that the gas-protecting member (7) comprises an inner protecting member (10) and at least one outer protecting member (14).**

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15. An equipment according to claim 14, **characterized in that the gas fed in through the inner protecting member (10) has a higher pressure than the gas fed in through the outer protecting member (14).**

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16. An equipment according to any of the preceding claims, **characterized in that on both sides of the groove, on the peripheral wall of the feed member, there is arranged at least one lining element (13) in order to seal the gap (17) left between the gas-protecting member and the feed member.**

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17. An equipment according to claim 16, **characterized in that the lining element is made of the same material as the material to be extruded.**